ATTACHMENT II-1-10

MANAGEMENT OF WASTE CONTAINING POLYCHLORINATED BIPHENYLS (PCBs)

1 INTRODUCTION

This Attachment shall govern the acceptance, storage, and disposal of PCB wastes in the Mixed Waste Landfill Cell. This Attachment shall describe controls for the management of PCB wastes at the Permittee's facility by addressing areas of characterization, acceptance, unloading, handling, storage, spill prevention and containment, liquid content, and wind dispersal.

2 SCOPE

This Attachment shall apply to all PCB/Radioactive Waste or PCB/Mixed Waste received at the Permittee's facility for management in the Mixed Waste Landfill Cell and is subject to the Ground Water Quality Discharge Permit UGW450005, as amended, the Radioactive Materials License UT 2300249, as amended, the TSCA Coordinated Approval and Waiver of Technical Requirements, as amended (TSCA Approval; August 12, 2004), this Permit, and the Approval Order from the Utah Division of Air Quality DAQE-AN0717016-06, as amended. The Permittee shall not use any provision in any other issued Permit, Order, or License to diminish or otherwise negate conditions of this Permit.

3 OBJECTIVES

Compliance with this Attachment is designed to prevent PCB waste from coming into direct contact with the environment and to protect human health. This Attachment outlines controls or requirements associated with:

a. PCB Waste Identification (Section 4)
b. Prohibitions (Section 5)
c. PCB Characterization (Section 6)
    1. Pre-shipment Information
    2. Certifications
d. PCB Waste Acceptance (Section 7)
    1. Incoming Load Inspections
    2. Free-Liquids and Leaking Shipments
    3. Discrepancy Resolution
e. Frequency of Analysis and Sample Collection (Section 8)
    1. Non-Conforming Results
f. PCB Waste Storage (Section 9)
    1. Facility Inspections
    2. PCB Waste Segregation

g. PCB Waste Disposal (Section 10)
   1. PCB Article Management
h. Environmental Monitoring (Section 11)
i. Reporting and Notification (Section 12)
j. Decontamination (Section 13)
k. Reuse of PCB Containers (Section 14)
l. Spill Response and Prevention (Section 15)
m. Retention of Records (Section 16)

4 PCB WASTE IDENTIFICATION

a. The Permittee may accept PCB and non-PCB wastes as defined in Section 4.b.ii. PCB wastes include PCB/Radioactive waste and PCB/Mixed Waste.

b. PCB/Radioactive waste and PCB/Mixed Waste shall be defined as wastes that are characterized as radioactive or mixed and that also contain PCBs.

c. PCB/Radioactive waste or PCB/Mixed Waste to be accepted for disposal shall be subject to the following definitions:

   i. PCB – Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

   ii. PCB contamination levels shall be defined as follows:

      1. Non-PCB "Waste" – PCBs or PCB Items with PCB concentrations < 50 ppm that have not been diluted to attain the final concentration, or PCB Items in which the PCBs have been removed through the decontamination procedures of 40 CFR 761.79. Wastes that have been diluted to PCB concentrations < 50 ppm remain PCB or PCB-Contaminated "Waste" based upon the non-diluted PCB concentration. This exception is applicable to PCB bulk remediation wastes described in 4.g.i of this Attachment.

      2. PCB-Contaminated "Waste" – PCBs or PCB Items containing PCBs at concentrations ≥ 50 ppm but < 500 ppm, or a non-porous surface having a surface PCB concentration > 10 µg/100 cm^2 but < 100 µg/100 cm^2, measured by a standard wipe test as defined in 40 CFR 761.123.

      3. PCB "Waste" – PCBs or PCB Items which contain PCBs at concentrations ≥ 500 ppm, or have surface PCB concentrations > 100 µg/100 cm^2 measured by a standard wipe test as defined in 40 CFR 761.123.

iii. PCB Item – Any PCB Article, PCB Article Container, PCB Container, PCB Equipment, or anything that deliberately or unintentionally contains or has as a part of it any PCB or PCBs.

iv. Drained – All free-flowing liquids have been removed from the PCB Item. Remaining liquid within the PCB Item shall be ≤ one percent of the total volume of the PCB Item. The PCB Item shall be filled with sufficient absorbent material to absorb any remaining liquid.

v. Flushed – After draining, the PCB Item has been filled with a solvent and allowed to stand for 18 continuous hours prior to the solvent being removed and disposed. This procedure shall be conducted in accordance with 40 CFR 761.60(b)(1)(i)(B).

vi. Decontaminated – The appropriate procedures, defined in 40 CFR 761.79 shall be performed to remove PCBs from non-porous surfaces, concrete, and non-porous surfaces covered with a porous surface, such as paint or coating on metal.

vii. General PCB Item definitions such as PCB Capacitors, PCB Articles, PCB Containers, and PCB Article Containers are found in 40 CFR 761.3.

d. PCB/Radioactive Waste or PCB/Mixed Waste to be accepted for disposal at the Mixed Waste Facility shall either meet the criteria specified in R315-315-7 (4.e, below), or the TSCA Approval (4.f, below), or be acceptable at a municipal or non-municipal non-hazardous landfill (4.g, below), or meet the bulk waste descriptions in 4.h, below, or be acceptable for processing through the thermal desorption unit in accordance with the thermal desorption Toxic Substance Control Act (TSCA) National Operating Approval administered by the United States Environmental Protection Agency (EPA; see 4.i, below).

i. Several of these waste groups are also acceptable at the low level radioactive waste facilities. These groups are described in Appendix I of the Ground Water Quality Discharge Permit UGW450005.

e. The specific PCB waste types that meet the criteria in R315-315-7 shall include:

i. Any waste containing PCBs at concentrations < 50 ppm (non-PCB) (R315-315-7(2)(a)).

ii. Intact, non-leaking PCB Small Capacitors from fluorescent lights (R315-315-7(2)(c)).

iii. PCB bulk product waste,

1. defined as plastics (such as plastic insulation from wire or cable: radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; Galbestos; non-liquid building demolition debris; or non-liquid PCB bulk product waste from the shredding of automobiles or household appliances from which PCB small capacitors have been removed (shredder fluff). See R315-315-7(3)(b)(i) and R315-315-7(3)(b)(v) [40 CFR 761.62(b)(1)(i)]; or

2. other PCB bulk product waste, sampled in accordance with the protocols set out in 40 CFR 761 Subpart R, that leaches PCBs at < 10 μg/L (10 ppb) of water measured using a procedure used to simulate leachate generation. See R315-315-7(3)(b)(v) [40 CFR 761.62(b)(1)(ii)].

iv. Drained PCB-Contaminated (PCB concentration ≥ 50 ppm and < 500 ppm) Articles (including Electrical Equipment). See R315-315-7(3)(b)(ii) [40 CFR 761.60(b)(6)(ii)(A) and 761.60(b)(4)].

v. Non-liquid cleaning materials and personal protective equipment waste at any concentration, including non-porous surfaces and other non-liquid materials such as rags, gloves, booties, other disposable personal protective equipment, and similar materials resulting from cleanup activities of PCB remediation wastes. See R315-315-7(3)(b)(iv) [40 CFR 761.61(a)(5)(v)(A)].

vi. Non-liquid wastes from wastes generated as a result of research and development activities and chemical analysis of PCBs authorized under R315-315-7(3)(b)(vi) [40 CFR 761.64(b)(2)].

f. Wastes that meet the TSCA Approval shall include:

i. Drained PCB Articles that contained PCB concentrations ≥ 500 ppm. In accordance with 40 CFR 761.60(b), this includes:

1. PCB Hydraulic Machines with PCB concentrations < 1,000 ppm;

2. PCB Hydraulic Machines with PCB concentrations ≥ 1,000 ppm that have been either flushed in accordance with 40 CFR 761.60(b)(1)(i)(B) or decontaminated in accordance with 40 CFR 761.79; and

3. Drained PCB Electrical Equipment and other drained PCB Articles.

ii. PCB Transformers that contained PCBs at concentrations ≥ 500 ppm and that have been drained and then flushed in accordance with 40 CFR 761.60(b)(1)(i)(B).

iii. Drained PCB Containers that formerly held PCBs at concentrations ≥ 500 ppm, provided that all free-flowing liquid is drained from the container (see 40 CFR 761.60(c)).

iv. Bulk remediation wastes with PCB concentrations ≥ 50 ppm that the generator has determined to be in the performance-based disposal category (40 CFR 761.61(b)).

g. Municipal and non-municipal non-hazardous landfill acceptable material shall include:

i. any PCB Items that have been drained and decontaminated in accordance with 40 CFR 761.79 (see 40 CFR 761.79(a)(4));

ii. intact, non-leaking PCB Small Capacitors (see 40 CFR 761.60(b)(2)(ii)); and

iii. drained PCB Containers that were used to contain PCBs at concentrations < 500 ppm, provided that all free-flowing liquid is drained from the container (see 40 CFR 761.60(c)).

1. If the PCB Container also held other hazardous constituents, appropriate cleaning requirements for these constituents shall be performed and documented.

h. Bulk Wastes shall include:

i. Bulk remediation wastes with PCB concentrations < 50 ppm (40 CFR 761.61(a)(5)(i)(B)(2)(ii));

ii. Bulk remediation wastes with PCB concentrations ≥ 50 ppm ((See 40 CFR 761.61(a)(5)(i)(B)(2)(iii)); and

iii. PCB bulk product waste, as defined in 40 CFR 761.3. This waste includes:

1. the wastes described in 4.e.iii. of this Attachment;

2. other PCB bulk product waste that leaches ≥ 10 µg/L PCBs (e.g., paper or felt gaskets contaminated by liquid PCBs); and

3. non-leaking fluorescent light ballasts containing PCBs in the potting material.

i. Wastes acceptable for thermal desorption processing shall be managed according to the requirements in Attachment II-1-12 and include:

i. expected liquids containing PCBs at any concentration;

ii. PCB Large Capacitors (intact or no longer intact); and

iii. no longer intact, leaking PCB Small Capacitors.

j. The following groups of PCB waste have been derived from the acceptable wastes described in 4.e. through 4.i. of this Attachment:

i. Drained and flushed PCB Transformers that previously contained PCBs at concentrations ≥ 500 ppm
ii. Intact, non-leaking PCB Small Capacitors (including light ballasts with PCB concentrations < 50 ppm in the potting material)
iii. Drained PCB Hydraulic Machines that previously contained PCBs at concentrations ≥ 50 ppm (flushed or decontaminated if the former PCB concentration was ≥ 1,000 ppm)
iv. Other Drained PCB Articles that previously contained PCBs at concentrations ≥ 500 ppm
v. Drained PCB-Contaminated Articles, including Electrical Equipment that previously contained PCBs at concentrations ≥ 50 ppm, and < 500 ppm
vi. Drained PCB Containers that previously contained PCBs at concentrations < 500 ppm
vii. Drained PCB Containers that previously contained PCBs at concentrations ≥ 500 ppm
viii. PCB Bulk Remediation Wastes that contain PCBs at concentrations < 50 ppm or has surface PCB concentrations < 100 µg/100cm^2
ix. PCB Bulk Remediation Wastes that contain PCBs at concentrations ≥ 50 ppm or has surface PCB concentrations ≥ 100 µg/100cm^2 – includes both self-implementing (4.h.ii.) and performance-based (4.f.iv.)
x. PCB Bulk Product Wastes that leaches < 10 µg/L PCBs
xi. PCB Bulk Product Wastes that leaches ≥ 10 µg/L PCBs
xii. PCB Waste from Research & Development
xiii. Intact or no longer intact PCB Large Capacitors or leaking PCB Small Capacitors for thermal desorption processing only
xiv. PCB liquids for thermal desorption processing only

k. In accordance with 40 CFR 761.65(b)(2)(iii), the Permittee may store PCB and PCB contaminated wastes, prior to disposal, on permitted hazardous waste storage areas as long as any spills are cleaned up in accordance to the requirements within 40 CFR 761 (see Section 15 of this Attachment).

5 PROHIBITIONS

a. The Permittee shall be prohibited from receiving liquids that contain PCBs except when the liquids are contained within intact, non-leaking PCB Small Capacitors or if the material is profiled for thermal desorption processing.

b. The Permittee shall be prohibited from receiving PCB Large Capacitors (intact or no longer intact), as defined in 40 CFR 761.3, unless they are correctly profiled on a Waste Profile Record for thermal desorption processing.

c. The Permittee shall be prohibited from receiving PCB Transformers that previously contained PCBs at concentrations ≥ 500 ppm that have not been drained or flushed in accordance with 40 CFR 761.60(b)(1)(i)(B).

d. The Permittee shall be prohibited from receiving PCB Hydraulic Machines with PCB concentrations ≥ 1,000 ppm that have not been either flushed in accordance with 40 CFR 761.60(b)(1)(i)(B) or decontaminated in accordance with 40 CFR 761.79.

e. The Permittee shall be prohibited from receiving PCB waste and non-PCB waste from a generator (or the generator's transporter) when there is not a current, valid, and acceptable Notice to Transport for the waste stream on file at the facility.

f. The Permittee shall be prohibited from receiving PCB waste from a generator (or the generator's transporter) if a complete and accurate hazardous waste manifest is not included with the shipment.

6 PCB CHARACTERIZATION

a. All shipments to the Mixed Waste facility that contain PCBs shall include a hazardous waste manifest.

b. Prior to shipment, the Permittee shall obtain a description of the material to be managed at the facility. This characterization shall be documented using a Waste Profile Record. Only waste classified into one or more of the groups in 4.j. of this Attachment shall arrive at the Permittee's facility. A single waste stream may contain several groups (see 4.j. of this Attachment) of PCB wastes.

c. Pre-shipment information from the generator shall include PCB, hazardous waste, and radioactive waste characterizations, as applicable. These characterizations

shall include minimum sampling parameters and frequency as required in the appropriate Permit or License.

i. PCB/Mixed Waste characterizations shall be performed in accordance with Attachment II-1, *Waste Analysis Plan*.

ii. PCB/Radioactive waste characterizations shall be performed in accordance with the Permittee's Radioactive Material License.

iii. PCB characterizations, when necessary, shall be performed using approved PCB sampling and testing methods provided in 40 CFR 761. These include:

1. the container and electrical equipment sampling criteria in 40 CFR 761.60(g)(2)(ii);

2. the extraction and analysis methods required in 40 CFR 761.61(a)(5)(i)(B)(2)(iv) and 40 CFR 761 Subparts N, O, P, and R; or

3. an alternative extraction and analysis procedure validated under 40 CFR 761 Subpart Q.

d. Flush/Decontamination Certifications

i. The following certifications are required for each applicable PCB Item within a shipment:

1. Flush certifications for PCB Transformers that contained PCBs at concentrations ≥ 500 ppm.

2. Flush certifications or decontamination certifications for Hydraulic Machines with PCB concentrations ≥ 1,000 ppm.

ii. Certifications shall consist of the following:

1. A unique identification number for each PCB Item that was flushed/decontaminated;

2. A statement that the flush/decontamination was performed in accordance with the appropriate regulations (see definitions in 4.c. of this Attachment);

3. The date that the flush/decontamination was performed; and

4. An authorized signature and date signed.

e. PCB characterization analyses shall not be required; however, if PCB analyses are not performed and/or included on the Waste Profile Record the following concentrations shall be assumed:

i. Transformers contained PCBs ≥ 500 ppm and flush certifications shall be required.

ii. Hydraulic Machines are contaminated at PCB concentrations ≥ 1,000 ppm and flush or decontamination certifications shall be required.

iii. PCB Containers contained PCBs at concentrations ≥ 500 ppm.

iv. PCB Bulk Remediation Wastes have concentrations ≥ 50 ppm.

v. PCB bulk product waste (other than those listed in 4.e.iii.(1)) leaches PCBs ≥ 10 μg/L.

f. An analysis of PCB Aroclors is sufficient to characterize the concentration of PCBs within the waste.

g. PCB waste shall not be diluted in order to avoid any provision of specifying a PCB concentration in accordance with 40 CFR 761. PCB concentration determination shall be made from "as-found" sampling. Re-sampling of waste in containers shall not be considered "as-found" sampling.

h. Chemical analysis used for PCB quantitation shall be reported on a dry/weight or wet/weight basis as determined by the PCB waste form.

i. The Permittee shall only accept analytical results from a Utah Department of Health certified laboratory.

j. The Permittee shall make PCB waste management decisions based only on accurate and valid analytical data and information (including flush and decontamination certifications), and/or the conservative assumptions described in 6.e. of this Attachment.

k. Only after the PCB components of the waste are characterized, analyzed (if necessary), and meet all of the requirements of this Attachment, this Permit, and other allied Licenses and Permits, shall the Permittee provide the generator with a Notice to Transport. The Notice to Transport shall indicate that the waste contains PCBs.

l. The generator/transporter(s) shall attach a PCB mark to all articles, equipment, and containers in accordance with 40 CFR 761.40. If the generator/transporter(s) is not required to attach a PCB mark in accordance with 40 CFR 761.40, the Permittee shall place a label identifying the waste as PCB waste on each container, according to the requirements of 40 CFR 761.45, prior to the end of the shift in which the waste was off-loaded.

7 PCB WASTE ACCEPTANCE

a. Waste containing PCBs shall be transported to the Permittee's facility in either PCB Containers or in lined containers (PCB Article Containers). The PCB Container or liner shall be of suitable material and construction to prohibit the release of PCB waste or non-waste materials at any time during transport or storage.

b. The container requirements of 7.a. are not applicable to large PCB Articles or large PCB Electrical Equipment.

c. Incoming PCB Item shipments shall contain flush and/or decontamination certifications, as appropriate, for each PCB Item requiring certification (see 6.d. of this Attachment).

d. All PCB bulk shipments destined for disposal in the Mixed Waste Landfill Cell shall be weighed upon arrival at the Permittee's facility.

    i. A weight discrepancy exists between the manifest and the shipment if there is a variation greater than 10 percent.

e. All PCB containerized shipments destined for disposal in the Mixed Waste Landfill Cell shall be counted and weighed upon arrival at the Permittee's facility.

    i. A count/weight discrepancy exists between the manifest and the shipment if:

        1. any variation in piece count, such as a discrepancy of one PCB container in a truckload; and

        2. variations greater than 10 percent in weight of PCB waste in containers.

f. PCB Article shipments destined for disposal in the Mixed Waste Landfill Cell shall be counted upon arrival at the Permittee's facility.

1. A count discrepancy exists between the manifest and the shipment if there is any variation in piece count, such as a discrepancy of one PCB Article in a truckload.
2. Discrepancy resolution shall be conducted in accordance with 7.j. of this Attachment for PCB/Mixed Waste or 7.l. of this Attachment for PCB/Radioactive Waste.

g. Incoming Load Inspections

i. The Permittee shall perform an initial inspection of the shipment and shipping papers for compliance with this Permit, Department of Transportation (DOT) and Division of Radiation Control (DRC) shipment regulations. Instances of non-compliance shall be recorded in the facility operating record.

ii. Shipments shall be visually inspected and documented to confirm that the PCB waste meets the PCB waste group(s) as profiled in the Waste Profile Record (see 6.b. of this Attachment) and that no other PCB waste classifications are present in the shipment.

iii. Shipments shall be visually inspected and inspection documented to assure that the waste liner, when used, has not been breached and PCB waste has not come into contact with the container. The following requirements are not applicable to drained PCB Container shipments.

1. If the PCB container or liner has been breached, the Permittee shall examine the analytical results for the waste within the PCB Container. If analytical results are not available, the waste shall be assumed to contain the concentrations detailed in 6.e. of this Attachment. The PCB Container may be managed as follows:

A. disposed within the Mixed Waste Landfill Cell;

B. reused in accordance with Section 14 of this Attachment; or

C. decontaminated in accordance with Section 13 of this Attachment.

2. The Permittee shall immediately withdraw its Notice to Transport from any generator whose PCB waste shipment has a container that has been breached. The Permittee shall not reinstate the Notice to Transport or issue a new Notice to Transport until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.

iv. Drained PCB Items shall be visually inspected to confirm that they are drained and that no free-flowing liquids are present.

v. PCB Articles and PCB Containers shall be visually inspected for the occurrence of potential external contamination (stains). All potential external contamination shall be noted in the operating record.

1. Stains may be minor or major in accordance with the following definitions:

A. Minor Stains shall be defined as local staining around openings with no signs of contamination unevenly distributed away from the opening (e.g., signs of contamination running down the sides of the item).

B. Major Stains shall be defined as external contamination not associated with openings and/or signs of contaminant leakage unevenly distributed away from openings (i.e., not minor).

2. Intact PCB Small Capacitors with stains shall be sampled for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyzed for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272). If any PCBs are detected from the analytical swipe and the contamination source is unknown, the capacitor shall be rejected as a leaking PCB Small Capacitor and shall be returned to the generator.

3. PCB Articles exhibiting major or minor stains that are not disposed on the date of arrival (see 10.d. of this Attachment) and require storage shall either be:

A. sampled for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyzed for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272);

B. decontaminated (double wash/double rinse) in accordance with Section 13 of this Attachment; or

C. isolated from wastes that do not contain PCBs within the storage area so that liquids generated from PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see Section 9.h. of this Attachment).

(1) isolation shall be required for stained PCB Articles that are awaiting the analytical results of 7.g.v.3.A.

4. If the analytical results from the wipe test of 7.g.v.3.A. detect PCBs at concentrations > 10 μg/100 cm^2, the PCB Article shall be either:

A. immediately disposed in the Mixed Waste Landfill Cell;

B. decontaminated in accordance with Section 13 of this Attachment; or

C. isolated from wastes that do not contain PCBs within the storage area so that liquids generated from PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see 9.h. of this Attachment).

5. Analytical results of the wipe test of major stains that detect PCBs at concentrations > 10 μg/100 cm^2 or that are decontaminated, constitute a shipment discrepancy and the generator shall be notified within seven days of the discrepancy. The Executive Secretary shall also be notified within 24 hours of receipt of analytical results or completion of decontamination activities.

h. Shrink-Wrapped PCB Articles

i. The inspection requirements of 7.g.i. through 7.g.iii. shall be followed for shrink-wrapped PCB Articles.

ii. Shrink-wrapped PCB Articles that have not been certified clean through visual inspection, wipe test sampling, decontamination, or generator surface decontamination certifications and that are placed into storage shall be isolated from wastes that do not contain PCBs within the storage area so that liquids generated from the shrink-wrapped PCB Articles shall be contained/absorbed separately from other storage area liquid accumulation (see 9.h. of this Attachment).

iii. If potential major stains (defined in 7.g.v.1.) are noted through the shrink-wrap and the PCB Article is not disposed on the date of arrival (see 10.d. of this Attachment), and require storage, the generator shall be notified within 48 hours and asked to provide a certification that the external surface of the PCB Article has been inspected and/or decontaminated in accordance with 40 CFR 761.79.

1. If a surface decontamination certification is not provided, the Permittee shall either

   A. maintain isolation (from wastes that do not contain PCBs) of the PCB Article until disposal is accomplished; or

   B. remove the shrink-wrap from the stained area and either:

      (1) sample for PCBs using a standard wipe test, as defined in 40 CFR 761.123, and analyze for PCBs using an appropriate SW-846 method (defined in 40 CFR 761.272); or

      (2) decontaminate (double wash/double rinse) in accordance with 40 CFR 761.375.

   C. Shrink-wrapped PCB Articles awaiting the analytical results of 7.h.iii.1.B(1) shall be isolated from wastes that do not contain PCBs.

   D. If the analytical results from the wipe test of 7.h.iii.1.B.(1) detects PCBs at concentrations > 10 µg/100 cm^2, the shrink-wrapped PCB Article shall either be:

      (1) immediately disposed in the Mixed Waste Landfill Cell;

      (2) decontaminated in accordance with Section 13 of this Attachment; or

      (3) isolated from wastes that do not contain PCBs.

2. Analytical results of the wipe test of major stains that detect PCBs at concentrations > 10 µg/100 cm^2 or that are decontaminated, constitute a shipment discrepancy and the generator shall be notified within seven days of the discrepancy. The Executive Secretary shall also be notified within 24 hours of receipt of analytical results or completion of decontamination activities.

iv. Shrink-wrapped PCB Articles that have been released from the isolation restrictions shall be marked accordingly.

i. PCB/Mixed Waste Acceptance

i. Incoming shipments shall be sampled in accordance with 8.b. of this Attachment and shall be analyzed for incoming acceptance parameters as described in Attachment II-1, *Waste Analysis Plan*.

ii. The Permittee shall visually inspect each shipment for free liquids in accordance with Attachment II-1, *Waste Analysis Plan.* For containerized waste shipments, this inspection shall be conducted for each container in the shipment.

iii. If unexpected free liquids are present, one of the following actions shall be taken:

1. the entire shipment may be rejected for receipt and disposal and shall be returned to the generator or another permitted facility that can accept the PCB liquid waste; or

2. the specific containers with free liquids within the shipment may be rejected for receipt and disposal and shall be returned to the generator or another permitted facility that can accept the PCB liquid waste; or

3. the liquid PCB waste may be re-profiled for management as a waste that is allowed to have PCBs in liquid form, such as thermal desorption.

A. Waste that is re-profiled shall require the analyses described in Section II.3 of Attachment II-1, *Waste Analysis Plan*, prior to further management.

iv. If a shipment arrives in a leaking condition, the Permittee shall manage the leaking shipment in accordance with Attachment II-6, *Contingency Plan.*

v. When a determination has been made to reject a shipment or containers within a shipment, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.

vi. Shipments of PCB Mixed Waste which remain in transportation equipment or vehicles (rail cars, flatbeds, vans, trucks, etc.) and which are awaiting analyses or results may remain at the Permittee's facility for up to ten days. Additional time may be granted if requested, in writing, prior

to the conclusion of the ten-day period and approved by the Executive Secretary.

j. PCB/Mixed Waste Discrepancy Resolution

i. Where discrepancies are identified, the discrepancies shall be noted in the operating record and resolved with the generator.

ii. Discrepancies shall be addressed, resolved, and documented in the Operating Record prior to disposal.

iii. Shipments with discrepancies may be placed in storage pending resolution. These shipments shall not be stored for a period greater than 90 days without prior Executive Secretary approval.

iv. After discrepancies have been addressed and resolved, the shipment shall be managed in accordance with this Attachment.

v. Discrepancies, such as simple, non-factual typographical errors that are overlooked or discovered at a later date, shall be resolved by making corrections as information becomes available. Corrections shall be initialed and dated at the time when they are made.

vi. Discrepancies that change the required management of waste shall be resolved and managed according to this Attachment.

vii. If a shipment involves containers that are not in good condition (e.g., rusting that represents a structural problem or that compromises containment of the waste, apparent structural defects, etc.) or if containers are leaking, the Permittee shall immediately transfer the waste from such containers to containers that are in good condition or otherwise manage the affected waste in accordance with the requirements of Attachment II-6, *Contingency Plan,* and if necessary, arrange for the return of the shipment to the generator. After two such occurrences from a generator, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.

viii. Appearance discrepancies other than an appearance discrepancy with the profiled PCB waste group may be resolved by adding information to the Waste Profile Record following consultation with the generator. Such

additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.

ix. If the Permittee accepts a waste with a discrepancy and the discrepancy is not resolved with the generator within 15 days after receiving the waste, the Permittee shall submit to the Executive Secretary a copy of the manifest or shipping paper at issue and a letter describing the discrepancy and attempts to reconcile it. This action shall be performed within three days after the 15-day time limit has expired.

x. When the Permittee adds corrections or information to the manifest, initials and a date shall be included with the notation. Such additional information shall be acknowledged by the generator's signature, identifying that information as true and correct.

k. PCB/Radioactive Waste Acceptance

i. Incoming shipments shall be sampled in accordance with 8.c. of this Attachment and shall be analyzed in accordance with the Waste Characterization Plan currently approved in the Permittee's Radioactive Materials License.

ii. The Permittee shall visually inspect each shipment for free liquids and perform the Paint Filter Liquids Test as required. For containerized waste shipments, this inspection shall be conducted for each container in the shipment.

iii. If unexpected free liquids are discovered, one of the following actions shall be taken:

1. the entire shipment may be rejected for receipt and disposal and shall be returned to the generator or another permitted facility that can accept the PCB liquid waste; or

2. the specific containers with free liquids within the shipment may be rejected for receipt and disposal and shall be returned to the generator or another permitted facility that can accept the PCB liquid waste; or

3. the liquid PCB waste may be re-profiled for management as a waste that is allowed to have PCBs in liquid form, such as thermal desorption.

A. Waste that is re-profiled shall require the analyses described in Section II.3 of Attachment II-1, *Waste Analysis Plan*, prior to further management.

iv. If a shipment arrives in a leaking condition, the Permittee shall manage the leaking shipment in accordance with Attachment II-6, *Contingency Plan.*

v. When a determination has been made to reject a shipment or containers within a shipment, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.

vi. Shipments of PCB waste that remain in transportation equipment or vehicles (rail cars, flatbeds, vans, trucks, etc.) and that are awaiting analyses or results may remain at the Permittee's facility for up to 10 days. Additional time may be granted if requested, in writing, prior to the conclusion of the 10-day period and approved by the Executive Secretary.

l. PCB/Radioactive Waste Discrepancy Resolution

i. Where discrepancies are identified, the discrepancies shall be noted in the operating record and resolved with the generator.

ii. Discrepancies shall be addressed and resolved prior to disposal.

iii. Shipments with discrepancies may be placed in storage pending resolution. These shipments shall not be stored for a period greater than 90 days without prior Executive Secretary approval.

iv. After discrepancies have been addressed or resolved, the shipment shall be managed in accordance with this Attachment.

v. Discrepancies, such as simple, non-factual typographical errors that are overlooked or discovered at a later date, shall be resolved by making corrections as information becomes available. Corrections shall be initialed and dated at the time when they are made.

vi. Discrepancies that change the required management of waste shall be resolved and managed as required by the Permit.

vii. If a shipment involves containers that are not in good condition (e.g., rusting that represents a structural problem or that compromises

containment of the waste, apparent structural defects, etc.) or if containers are leaking, the Permittee shall immediately transfer the waste from such containers to containers that are in good condition or otherwise manage the affected waste in accordance with the requirements of Attachment II-6, *Contingency Plan,* and if necessary, arrange for the return of the shipment to the generator. After two such occurrences from a generator, the Permittee shall withdraw the Notice to Transport for all PCB waste streams from that particular generator. The Permittee shall not reinstate the Notice to Transport(s) or issue a new Notice to Transport(s) until a corrective action plan has been approved by the Permittee and notification has been provided to the Executive Secretary with a copy of the corrective action plan and its approval.

viii. Appearance discrepancies, other than an appearance discrepancy with the PCB classification profile, may be resolved by adding information to the Waste Profile Record following consultation with the generator. Such additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.

ix. If the Permittee accepts a waste with a discrepancy and the discrepancy is not resolved with the generator within 15 days after receiving the waste, the Permittee shall submit to the Executive Secretary a copy of the manifest or shipping paper at issue and a letter describing the discrepancy and attempts to reconcile it. This action shall be performed within three days after the 15 day time limit has expired.

x. When the Permittee adds corrections or information to the manifest, initials and a date shall be included with the notation. Such additional information shall be acknowledged by the generator's signature, identifying the information as true and correct.

m. Requirements for PCB Radioactive Waste and PCB Mixed Waste with debris:

i. When PCB waste shipments contain material from the list of debris identified in 7.m.vi. below, and when these materials cannot be sampled reasonably and representatively, the Site Manager or authorized designee may waive the sampling and analysis of the non-sampleable portion of the PCB waste shipment.

ii. For PCB bulk product and PCB remediation wastes as defined in Section 4 of this Attachment, the generator may waive the PCB sampling and analytical requirements if the PCB concentration is assumed to be ≥ 50 ppm.

iii. PCB sampling and analysis may be waived for intact, non-leaking PCB Small Capacitors, drained PCB-Contaminated Articles and Electrical Equipment, drained PCB Transformers, and other drained PCB Articles.

iv. PCB sampling/analysis waivers shall be documented, with an explanation and justification, and maintained in the Operating Record.

v. A copy of the sampling/analysis waiver shall be sent to the Executive Secretary in accordance with Condition II.M.2. of this Permit.

vi. Debris:

1. Commercial shaped solid-phase metals (excluding TCLP-related metals, e.g., lead)
2. Wood (excluding sawdust or shavings)
3. Concrete
4. Brick
5. Stone
6. Glass
7. Plastic
8. Rubber
9. Boots
10. Suits
11. Gloves
12. Sheet metal
13. Construction debris
14. Building debris
15. Empty containers
16. Wire

8 FREQUENCY OF ANALYSES AND SAMPLE COLLECTION REQUIREMENTS

a. One rail car (any type) may represent a nominal 100 cubic yards; multiple intermodal containers upon a railcar may represent a nominal 20 cubic yards per intermodal container; and one highway shipment (any type) may represent a nominal 20 cubic yards. The Permittee may alternatively use the actual volumes for counting purposes. The Permittee shall indicate the use of actual or nominal volumes in the operating record and in any reports or documents required by this Permit, or requested by the Executive Secretary.

b. PCB/Mixed Waste

i. On-site sampling and analysis of PCB waste in rail cars shall occur within ten days of arrival to the Permittee's-operated spur.

ii. For rail shipments, if following receipt of analytical results the waste in holding is not acceptable, the Permittee shall document the waiver in the Operating Record, within five days or return the waste to the generator, or transport the waste to another approved facility within 15 days of receipt of analytical results.

iii. For each waste stream, sampling frequency shall be performed in accordance with Attachment II-1, *Waste Analysis Plan.*

c. PCB/Radioactive Waste

i. For sampling of PCBs in PCB waste types when required to verify PCB/Radioactive waste characterization, the Permittee shall follow the current Waste Characterization Plan approved under its Radioactive Material License.

9 PCB WASTE STORAGE

a. Upon acceptance of a shipment, the Permittee shall manage PCB waste as either bulk PCB waste, containerized PCB waste, drained PCB Transformers, drained PCB Articles, drained PCB Containers, intact, non-leaking PCB Small Capacitors, or PCB waste requiring thermal desorption processing.

b. PCB/Radioactive Waste received in railcars at the Mixed Waste Facility shall be managed in accordance with Attachment III-1, *Container Management Plan*, of this Permit.

c. Containerized PCB/Radioactive Waste shall only be stored within permitted Mixed Waste Storage Areas.

d. Containerized PCB/Mixed Waste shall only be stored within permitted Mixed Waste Storage Areas.

e. Drained PCB Transformers, other drained PCB Articles, and intact, non-leaking PCB Small Capacitors shall only be stored within permitted Mixed Waste Storage Areas.

f. PCB wastes for thermal desorption which may contain liquids shall be stored within permitted Mixed Waste Storage Areas with secondary containment as described in Attachment III-1 of this Permit.

g. PCB markings shall be posted at all security gates and doors and at least 100-foot intervals on the artificial barrier. The PCB marking shall be in accordance with 40 CFR 761.45(a).

h. Drained PCB Transformers, other drained PCB Articles, and intact PCB Small Capacitors that have potential external contamination (staining) awaiting analytical results or decontamination (see 7.g.v. of this Attachment) shall be isolated from wastes that do not contain PCBs within the storage area so that all liquid contamination generated from these items shall be contained and absorbed (or otherwise managed) separately from other storage area liquid accumulation.

i. Shrink-wrapped PCB Transformers, other shrink-wrapped drained PCB Articles, and shrink-wrapped intact PCB Small Capacitors that do not have a generator surface decontamination certification (see 7.h.iii of this Attachment) shall be isolated from wastes that do not contain PCBs within the storage area so that all liquid contamination generated from these items shall be contained and absorbed (or otherwise managed) separately from other storage area liquid accumulation.

j. PCB waste shall be clearly labeled to identify the generator and the date of arrival. PCB waste movement shall be tracked in accordance with Attachment III-2, *Waste Identification and Tracking Plan*.

k. Large PCB Articles and Equipment shall be managed to prevent damage to the storage area surface. If damage occurs, the PCB Item shall immediately be moved to another location and the damaged area shall be isolated from the rest of the storage area so that liquid accumulation from other areas shall not contact the damaged area.

l. PCB waste shall be disposed within one year of acceptance at the Permittee's facility unless additional time is requested, in writing, prior to the conclusion of the one year period and approved by the Executive Secretary.

m. Any storage area containing PCB waste shall be inspected to ensure that the waste is properly stored and that PCB Containers and/or PCB Items are not leaking. Storage area inspections shall be conducted daily, as part of the General Facility Inspection, in accordance with Attachment II-3, *Site Inspection Plan*.

n. If PCB Containers or PCB Items show evidence of leakage other than a stain, the Permittee shall implement Attachment II-6, *Contingency Plan.* Spills shall be managed in accordance with Section 15 of this Attachment.

o. Leaking PCB Containers or PCB Items shall be isolated from wastes that do not contain PCBs so that all liquid contamination from these items shall be contained and absorbed separately from other storage area liquid accumulation. By definition (40 CFR 761.3), external PCB contamination (stains) upon PCB Items constitutes a leaking condition.

10 PCB WASTE DISPOSAL

a. Bulk shipments of PCB bulk product and PCB remediation waste shall be offloaded and directly disposed within the Mixed Waste Landfill Cell provided that the bulk waste shipment has been accepted by the Permittee and met applicable provisions of this Permit, the TSCA Approval, and allied Licenses or Permits.

b. PCB Waste, including drained PCB Transformers, other drained PCB Articles, drained PCB Containers, and intact non-leaking PCB Small Capacitors, shall be disposed within the Mixed Waste Landfill Cell in accordance with Module V, *Disposal in Landfills*.

c. For wastes that require thermal desorption processing, the solid residual wastes shall be disposed in the Mixed Waste Landfill Cell after processing has been completed in accordance with Attachment II-1-12 of this Permit.

d. Drained PCB Transformers and other drained PCB Articles and PCB Containers that have staining (minor or major), as defined in 7.g.v.1. of this Attachment, may be placed in the Mixed Waste Landfill Cell without further sampling or decontamination provided that the PCB Item is placed into final disposal position on the same day that the PCB Item was unloaded from the transport vehicle.

e. Shrink-wrapping may be cut or removed during placement of PCB Items in the Mixed Waste Landfill Cell in order to provide a free-flowing pathway for CLSM.

f. Radiation Work Permits (RWPs) shall be developed and issued for the disposal of PCB Waste. RWPs shall be prepared as follows:

    i. the Waste Profile Record shall be evaluated to determine material hazards for the waste stream;

    ii. all applicable regulations e.g., OSHA, TSCA, etc. shall be reviewed for each material hazard to designate the proper personal protective equipment and handling techniques for PCB Waste;

    iii. an RWP shall be prepared and issued; and

    iv. copies of the current active RWPs issued under this Attachment shall be posted within the Mixed Waste Operations Building while in effect.

g. Disposal lift areas containing PCBs shall be covered to secure the exposed materials at the end of each working day. This covering may consist of:

    i. six inches of soil or soil-like non-PCB, non-hazardous material;

ii. a commercial fixative, approved by the Executive Secretary and applied in accordance with the manufacturer's instructions; or

iii. alternative covers such as tarps and plastics.

1. the Permittee shall inform the Executive Secretary and receive approval prior to the use of alternative covers.

iv. When waste is comprised of debris, etc. the material shall be blended with fill material. The blending provides security for the exposed materials and shall function equivalent to covering the PCBs with six inches of soil.

1. After the blending has been completed the lift area(s) shall be visually inspected for the presence of dispersible debris. If dispersible debris are visible, they shall be covered in order to secure the dispersible debris prior to the end of the work day.

v. Drained PCB Transformers, other drained PCB Articles, drained PCB Containers, and intact, non-leaking PCB Small Capacitors shall not require a covering. These items may be placed in the cell in preparation of a CLSM pour for final disposal without cover.

vi. MACRO forms and other large debris that are not wind dispersible shall not require a covering. These items may be placed in the cell in preparation of a CLSM pour for final disposal without cover.

h. Within 30 days of the date of disposal of each item of PCB waste identified on a manifest, the Permittee shall prepare and provide to the generator a Certificate of Disposal in accordance with 40 CFR 761.218. The Certificate of Disposal shall include:

i. the identity of the disposal facility by name, address, and EPA identification number;

ii. the identity of the PCB waste affected by the Certificate of Disposal including reference to the manifest number for the shipment;

iii. a statement certifying the fact of disposal of the identified PCB waste, including the date(s) of disposal; and

iv. certification language defined in 40 CFR 761.3.

i. Certificates of Disposal shall be maintained in the operating record.

11 ENVIRONMENTAL MONITORING

a. The Permittee shall monitor and report leachate collection removal volumes in accordance with Module V, *Disposal in Landfills*, Conditions V.F.1. and V.F.2. of this Permit.

b. Landfill leachate collected from sump areas that contain PCB Waste shall be sampled and analyzed for PCBs semi-annually. The practical quantitation limit for this analysis shall be 0.6 µg/l (0.6 ppb) or less.

c. Groundwater Monitoring shall be performed in accordance with Module VI of this Permit. PCB analysis shall be performed using SW-846 Test Method 8082 or equivalent Test Method approved in writing by the Executive Secretary. The Groundwater Protection Level (GWPL) for Polychlorinated Biphenyls shall be 2.5 µg/l (2.5 ppb). The Practical Quantitation Limit (PQL) shall be 0.6 µg/l (0.6 ppb) or less.

d. Semi-annual Soil Monitoring shall be performed in accordance with the Radiation Safety Manual, Environmental Monitoring Program. Soil samples obtained from soil monitoring locations shall be analyzed for PCBs.

12 REPORTING AND NOTIFICATION REQUIREMENTS

a. The Permittee shall prepare an annual document log, in accordance with 40 CFR 761.180(b), by July 1 of each year for the previous calendar year. Data from the annual document log will be used to prepare the annual report in 11.b. of this Attachment.

b. The Permittee shall submit to the Executive Secretary and Region VIII of the Environmental Protection Agency an annual report on the amount of PCB waste received for the preceding calendar year on or before July 15. The Executive Secretary may add or remove reporting elements to this report. This report shall contain the following elements, at a minimum:

   i. a summary of PCB waste amounts received and disposed by the PCB waste groups as described in 4.j. of this Attachment for each generator. At a minimum, this report shall contain all of the information required in 40 CFR 761.180(b) for a disposer and commercial storer of PCB waste;

   ii. the amount of PCB waste rejected by the Permittee, by generator;

   iii. the amount of PCB waste generated at the facility; and

   iv. the amount of PCB waste spilled at the site.

c. The Permittee shall submit leachate collection/removal volumes for each collection or leak detection sump to the Executive Secretary and Region VIII of the Environmental Protection Agency on a quarterly basis (no later than 20 days following the end of the quarter).

   i. Leachate collection/removal volumes data may be submitted in an electronic format.

   ii. If the Permittee discovers the presence of liquid in the second-lowest leak detection system in quantities greater than fifteen gallons per acre per day; or if the Permittee discovers the presence of liquid in the lowest leak detection system in quantities greater than ten gallons per acre per day; the Permittee shall notify the Executive Secretary and Region VIII of the Environmental Protection Agency within 72 hours of discovery.

   iii. If corrective action is required in accordance with Module V, *Disposal in Landfills*, or Module VI, *Groundwater Monitoring*, the Permittee shall report all activities to the Executive Secretary and Region VIII of the Environmental Protection Agency.

d. The Permittee shall submit groundwater and leachate monitoring data (collected in accordance with 11.b. and 11.c. of this Attachment) to the Executive Secretary and Region VIII of the Environmental Protection Agency on a semi-annual basis.

   i. The reports should include, at a minimum, groundwater elevations for monitoring wells, analyses for PCBs, pH, specific conductance, chlorinated organics, and volumes of leachate collected from the sumps.

   ii. The detection limits and report schedule shall conform to the requirements in Module V, *Disposal in Landfills*, and Module VI, *Groundwater Monitoring*.

   iii. If the Permittee detects chlorinated organics at any leachate sump or monitoring well, the Executive Secretary and Region VIII of the Environmental Protection Agency shall be notified within seven days of the discovery.

   iv. Groundwater and leachate monitoring data may be submitted in an electronic format.

e. The results of semi-annual soil monitoring performed in accordance with 11.d. of this Attachment shall be submitted to the Executive Secretary in an annual report on or before March 31 of the following year.

i. If PCBs are detected in the semi-annual soil samples, the Executive Secretary shall be notified within seven days of discovery.

f. The Permittee shall notify Region VIII of the Environmental Protection Agency, in writing, in advance of any pending amendment to this Permit that involves conditions found at 40 CFR 761.75, or contains any new provisions concerning PCB waste which is not included in 40 CFR 761.75., which also requires Environmental Protection Agency approval, or which would be less stringent than a requirement of the regulations in 40 CFR 761.

g. For other modifications of existing conditions affecting PCB waste requirements, the Permittee shall notify Region VIII of the Environmental Protection Agency before or within five calendar days of the changes in this Permit.

13 DECONTAMINATION

a. Decontamination activities shall be performed in accordance with 40 CFR 761.79.

b. The Permittee shall not conduct or use decontamination methods not covered by 40 CFR 761 without prior written approval of the Executive Secretary.

c. Decontamination of minor and major stains on PCB Items (see 7.g.v. of this Attachment) shall use the double wash/double rinse method of 40 CFR 761.375.

d. Decontamination activities should use methods that minimize the use of water or solvents and the release of PCBs to the environment.

e. The shipping containers of PCB Bulk Product Waste as defined in R315-315-7 shall be deemed decontaminated after removal of all visible remnants of bulk debris.

f. PCB Liquid waste generated from the use of water or solvents shall be managed as "decontamination waste and residues" in accordance with 40 CFR 761.79(g) and other applicable regulations.

14 REUSE OF CONTAINERS THAT HELD PCBs

a. Containers that held PCB wastes that came in direct contact with the container may be used for storage and transportation of waste at the Mixed Waste Facility. Other uses shall require approval, in writing, by the Executive Secretary.

b. Containers that held PCB wastes shall be RCRA empty [defined in R315-2-7(b)(1) and (3)] prior to use with another waste stream.

c. Reused containers under this Section, shall be labeled as PCB-reused, stored, and disposed in accordance with this Attachment.

d. Containers that held PCB wastes for reuse shall not be released from the restricted area.

15 SPILL RESPONSE AND PREVENTION

a. Spill response shall be conducted in accordance with Attachment II-6, *Contingency Plan*, and 40 CFR 761 Subpart G. All contaminated PPE from spill response shall be managed as part of the waste stream clean-up.

16 RETENTION OF RECORDS

a. The Permittee shall retain Waste Profile Records, records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this Permit, and inspection records as part of the operating record of this Permit.

END OF ATTACHMENT II-1-10